CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-11 (canceled).

Claim 12 (currently amended) A method for determining paths in a communication network having links for an optimized shortest-path routing relative to the network loading and having a traffic volume expected for the communication network, comprising:

initializing a link cost for each of the links;

calculating optimum paths for the routing in the communication network relative to the link costs;

determining a parameter for each the links based on the link traffic load of the communication network for routing the expected traffic volume through the calculated optimum paths;

changing the link costs based on the determined parameters such that a link cost of a first link is increased relative to a link cost of a second link when a determined parameter of the first link is greater than a determined parameter of the second link, in accordance to the formula:

link cost = (link cost) x (parameter) / average loading of the link;

re-determining the parameters for the routing of the expected traffic volume via the subset of paths of the calculated paths that are optimized with respect to the changed link costs;

repeating the changing and the re-determining steps until achieving a termination criterion; and

using the subset of paths in a last step of re-determining for the routing in the communication network.

Claim 13 (previously presented). The method in accordance with claim 12, wherein all paths for the routing in the communication network that are optimum relative to the initial values for the link costs are calculated.

Claim 14 (previously presented). The method in accordance with claim 12, wherein the parameter for each link is based on item selected from the group consisting of an absolute traffic load, a traffic load relative to the link bandwidth, traffic-related costs occurring during the use of the link, an availability of the link, a run time of the link, and a load capacity of final nodes of the link.

Claim 15 (previously presented). The method in accordance with claim 12, wherein the links are initialized to the same link cost.

Claim 16 (previously presented). The method in accordance with claim 12, wherein the paths are calculated via an equal cost multi path (ECMP) method.

Claim 17 (cancelled).

Claim 18 (currently amended). The method in accordance with claim 12,

wherein a maximum of the parameters is determined during the re-determining step; and wherein the termination criterion is achieved when the maximum of the parameters is greater than the maximum of the parameters during the preceding changing and re-determining steps.

Claim 19 (previously presented). The method in accordance with claim 18, wherein the subset of paths for the preceding changing and re-determining steps is used for routing in the communication network.

Claim 20 (previously presented). The method in accordance with claim 12,

wherein a maximum of the parameters is determined during the re-determining step; and

wherein the termination criterion is achieved:

when the maximum of the parameters is greater than the maximum of the parameters during the preceding changing and re-determining steps, and

when a determination is made that during the preceding changing and re-determining steps the subset of paths contains no alternative paths.

Claim 21 (previously presented). The method in accordance with claim 20,

further comprising changing a traffic matrix via random values in relation to entries in a random matrix, so that the subset of paths contains no alternative paths,

wherein the expected traffic volume is based on the traffic matrix.

Claim 22 (previously presented). The method in accordance with claim 20, wherein the subset of paths for the preceding changing and re-determining steps is used for routing in the communication network.

Claim 23 (previously presented). The method in accordance with claim 12, wherein the expected traffic volume is based on a traffic matrix.